

Agency Data
2004

PIRT

2005 Annual Report
Pesticide Incident Reporting and Tracking
Review Panel

December 2005

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We wish to acknowledge and thank our panel representatives for their contributions:

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Pesticide Incident Reporting and Tracking Review Panel

Annual Report

A report to the legislature as required by Chapter 380, Laws of 1989, and RCW 70.104.

December 2005

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The annual report is available in electronic format on the Internet at
<http://www.doh.wa.gov/ehp/ts/pirt/pubs-pirt.htm>.

Report suspected pesticide-related illness to Washington State Department of Health at the toll-free number, 1.888.586.9427.



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List of Acronyms

DPP	Definitely, Probably or Possibly
DOH	Washington State Department of Health
Ecology	Washington State Department of Ecology
EPA	United States Environmental Protection Agency
L&I	Washington State Department of Labor and Industries
NIOSH	National Institute for Occupational Safety and Health
NPDES	National Pollutant Discharge Elimination System
PCO	Pest Control Operator
PIRT	Pesticide Incident Reporting and Tracking
RCW	Revised Code of Washington
SPI	Structural Pest Inspection
UPEST	Urban Pesticide Education Strategy Team
WAC	Washington Administrative Code
WDO	Wood Destroying Organism
WISHA	Washington Industrial Safety and Health Act
WSDA	Washington State Department of Agriculture
WPC	Washington Poison Center
WPS	Worker Protection Standard

Executive Summary

The annual report summarizes pesticide incidence data collected by agencies during 2004 and activities of the PIRT Review Panel for 2005.

The Pesticide Incident Reporting and Tracking (PIRT) Review Panel was created by RCW 70.104.090 to monitor pesticide-related incidents that have suspected health or environmental effects. Members of the Panel include representatives of six agencies that respond to statewide incidents, two university members, a practicing toxicologist and a member of the public appointed by the Governor (Appendix A).

Member agencies conduct pesticide incident investigations in accordance with their specific statutory responsibilities and report findings to the Panel for evaluation. The Panel submits an annual report summarizing pesticide incidents to the legislature. This 2005 report presents individual and combined agency data for 2004 and a summary of the activities of the Panel and agencies for 2005.

Combined Agency Data

The overlap in pesticide-related cases between agencies for 2004 is displayed in Table 1. The shaded cells show the total number of incidents reported to the Panel by each agency. The white cells show the numbers of incidents that overlap for the agencies represented by the cell. Where two numbers appear in the cells, the first number represents the number of events and the second number represents the number of people involved.

Table 1. Overlap of Pesticide-Related Events* by Agency, 2004

	WSDA	Ecology	DOH	L&I	WISHA	WPC
WSDA	200	2	16/30	1	2	1
Ecology	2	29	2/9	1	-	-
DOH	16/30	2/9	245/269	101	2	150
L&I Claims	1	1	101	101	1	21
WISHA	2	-	2	1	43	-
WPC	1	-	150	21	-	2342

* Events include WSDA complaints by event, Ecology complaints by event, DOH incidents by people involved, L&I claims by people involved, L&I WISHA inspections by employer, and WPC calls by people involved. Where two numbers appear, the first number represents events and the second number represents people involved.

It is difficult to aggregate PIRT data because each agency collects a different type of data. For example, data from the Ecology Spills Program includes both

actual environmental contamination and calls from concerned neighbors about the possible illegal use of pesticides that turn out to be legal. Data from Washington Poison Center (WPC) includes calls about human exposures with and without associated illness. Washington State Department of Agriculture (WSDA) data include actual violations, cases of crop damage, complaints about inadequate pest control inspections, and problems with licensing of pesticide applicators.

PIRT Panel Activities and Highlighted Issues for 2005

The Panel made ten recommendations for Panel action and member agency action for 2005. Ongoing, mandated recommendations include review of member agencies' independent strategies to reduce pesticide incidents based on combined PIRT data, and reporting on product labels that are inadequate or unclear. Issues monitored by the Panel in 2005 include West Nile virus, cholinesterase monitoring, the Worker Protection Standard, and the proposed modification to the General Pesticide Rules concerning notification of certain pesticide applications.

Cholinesterase Monitoring

The Cholinesterase Monitoring Rule (Chapter 296-148 WAC) was implemented in February 2004. Based on the final report, *Cholinesterase Monitoring of Pesticide Handlers in Agriculture: 2005*, 2263 workers participated in the cholinesterase monitoring program during 2005. A baseline test was performed for each enrolled worker. A total of 904 periodic tests were performed for 611 workers who had reached the pesticide-handling hour threshold for 30 hours in 30 consecutive days. A total of 59 alerts were issued to workers at the workplace evaluation level and 10 to workers at the workplace removal level. Overall, the data indicate that 9.6 percent of enrolled workers had cholinesterase depression at the time of periodic testing during 2005.

Department of Agriculture Proposed Rule – PIRT Letter of Support

The Panel wrote a letter to WSDA in support of the proposed modification to the General Pesticide Rules, WAC 16-228. The proposed changes require notification of the application of highly toxic or corrosive pesticides via aerial, air blast, outdoor fumigation or overhead chemigation applications when the application site and the property boundaries touch and the application is within one-half mile of schools, hospitals, nursing homes, and adult and child day care centers.

Summary Data for PIRT Agencies

The following agency summaries identify key points from the analysis of 2004 pesticide incident data.

Department of Agriculture

In 2004, WSDA investigated 200 pesticide-related complaints. After investigation it was determined that 110 (55%) involved pesticide applications. The other

complaints concerned such issues as improper licenses and Wood Destroying Organism inspections. Sixty-four (32%) complaints were the result of pesticide drift to property and 22 (11%) concerned drift to humans. Of the 200 complaints, 122 (61%) involved one or more violations. This is consistent with previous years. Thirty-six (30%) of the violations involved commercial applicators.

Department of Ecology

In 2004, Washington State Department of Ecology (Ecology) investigated 29 pesticide-related complaints involving threats to air, water, or soil. Ten complaints concerned threats to ground or surface water, 10 involved spills or fires, and 6 involved pesticide disposal or waste concerns. Ecology is responsible for oversight of contaminated areas requiring cleanup or monitoring. During 2004, Ecology placed 11 new pesticide-contaminated sites on the Toxic Cleanup Program list.

Department of Health

In 2004, Washington State Department of Health (DOH) investigated 245 pesticide incidents involving 269 individuals. Of the 269 illnesses/injuries, 204 (76%) were classified as definitely, probably or possibly (DPP) related to pesticide exposure. Sixty-four (31%) of the 2004 DPP cases were related to agriculture. Agricultural cases most often involved the tree fruit industry (41). Most agricultural cases involved agricultural workers (53); 36 of the 53 workers were handling pesticides at the time of their exposure. Only 37 of the 140 non-agricultural cases were working at the time of their exposure; 14 of the 37 workers were handling pesticides. Of the 103 non-occupational, non-agricultural cases, 89 (86%) occurred in homes.

Department of Labor and Industries

In 2004, Washington State Department of Labor and Industries (L&I) Washington Industrial Safety and Health Act (WISHA) Services Division conducted 43 pesticide-related safety and health inspections. Eighteen (42%) of the inspections resulted in general or serious citations being issued to the employer and 25 inspections did not involve citations.

In 2004, the L&I Insurance Services Division, Claims Administration Program received 101 claims relating to pesticide illness. Of the 101 claims, 73 (72%) were related to agriculture and 28 were non-agricultural. Of the 101 claims, 70 claims were classified as medical only/non-compensable, 4 were time loss, 26 were rejected and 1 had an uncertain status. Fifty-three of the workers were handling pesticides at the time of their exposure. DOH investigated the 101 claims and classified 69 (68%) as having signs or symptoms definitely, probably or possibly related to the pesticide exposure.

Washington Poison Center

In 2004, Washington Poison Center (WPC) provided immediate professional medical advice regarding pesticide-related questions and emergencies to 2342

callers. Of the 2342 calls, 1302 involved insecticides and 155 involved insect repellents. Herbicides were involved in 422 of the calls. The caller reported at least a minor health effect in 218 of the 2342 calls. DOH followed-up on 305 calls where the caller sought medical care and where the exposure was not part of a suicidal gesture.

Summary Data

Table 2 summarizes 2004 pesticide-related data for each agency. Pesticide-related data from each agency are described in detail in the following Agency Summary Reports. Individual incident descriptions are provided in Appendix C.

Table 2. Agency Summaries of Pesticide Events, 2004

Department of Agriculture 200 Complaints Resulting in 122 Violations			
Complaints	200	Violations	122
Location of Complaint		Violations by Type of Activity	
Eastern Washington	117	Agriculture	42
Western Washington	82	Commercial/industrial	17
Out-of-State	1	PCO/WDO	22
Enforcement Actions*	125	Residential (homeowners)	5
Notice of correction (NOC)	98	Right-of-way	5
Notice of intent/Admin action (NOI)	20	Other (license/records)	31
Advisory letter/Warning letter	4	License Involved with Violations	122
Referred	2	Commercial applicator	36
Verbal warning	1	Unlicensed	36
No action indicated	76	Private applicator	22
		Public operator	13
		Other (SPI, Dealer, Consultant)	15
* One case had 2 actions.			
Department of Health 245 Incidents Involving 269 Individual Cases			
Type of Incident	245	Classification of Cases	269
Agriculture	92	Definite	63
Residential	108	Probable	55
Commercial/Industrial	20	Possible	86
Other	25	Suspicious	11
		Unlikely	16
		Insufficient information	38
Childhood Cases ≤ 18 years old	34	Definite, Probable or Possible Cases	204
Definite, probably or possible cases	22	Agriculture	64
		Non-Agriculture	140
Department of Labor and Industries 43 Industrial Safety and Health Inspections 101 Worker Compensation Claims			
Pesticide-related Inspections	43	Worker Compensation Claims	101
Serious and/or General Citations	18	Agriculture	73
No citations	25	Non-Agriculture	28
Type of Business	43	Benefits	101
Orchard	28	Accepted – Medical/time loss	74
Vineyard	2	Rejected	26
Seeds	2	Pending	1
Berry	4		
Other farm	7		
Department of Ecology 29 Pesticide Complaints			
Threats to ground or surface water	10		
Spills or fires	10		
Pesticide disposal or waste concerns	6		
Unsafe pesticide storage or handling	3		
Washington Poison Center 2342 Human Exposure Pesticide-Related Calls			
Referred to DOH for follow-up	305		

